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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,816	12/04/2003	Charles Hood	16356.836 (DC-05456)	7468
27683	7590	12/15/2005	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			HOFFBERG, ROBERT JOSEPH	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <span style="float: right;">UK</span> 10/727,816	Applicant(s) HOOD ET AL.	
	Examiner Robert J. Hoffberg	Art Unit 2835	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/7/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/04</u> . | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action***

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Villanueva et al. (US 2005/0030718).

With respect to Claim 1, Villanueva et al. teaches a processor loading apparatus comprising: a board member (Fig. 2, #26); a processor socket mounted (Fig. 2, #30) on the board member; a processor (Fig. 2, #28) seated in the processor socket; a frame member (Fig. 2, #10) mounted on the board member; a plurality of connector portions (Fig. 3, #16 and 18) on the frame member; and a resilient load member (Fig. 2, #12) with a first end (Fig. 3, #16) connected to one of the connector portions and a second end (Fig. 3, #18) connected to another one of the connector portions, whereby the connection of the second end deforms (see Fig. 3) the load member into engagement with the processor and urges the processor into the processor socket.

With respect to Claims 2, Villanueva et al. further teaches wherein the frame member surrounds (see Fig. 3) the processor socket.

With respect to Claims 4, Villanueva et al. further teaches wherein the first end of the resilient load member is pivotally (Fig. 2, #16) connected to one of the connector portions and the second end is latched (Fig. 3, #18) to another one of the connector portions.

With respect to Claims 5, Villanueva et al. further teaches wherein the processor includes a thermal connection surface (Para. 0022, line 18).

With respect to Claims 6, Villanueva et al. further teaches wherein the resilient load member includes an opening (Fig. 2, #20) whereby when the second end of the resilient load member is forcibly connected to its respective connector portion, the thermal connection surface is exposed in the opening.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 7-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Villanueva et al. (US 2005/0030718) in view of Ma (US 6,791,847).

With respect to Claim 3, Villanueva et al. teaches the apparatus of claim 1. Villanueva et al. does not teach a support member. Ma teaches a support member (Fig. 1, #72) mounted on the board member (Fig. 1, #50) adjacent to the frame member (Fig. 1, #36). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the processor loading apparatus of Villanueva et al. with

that of Ma for the purpose of using the support member on apposite side of the board to fasten the frame member to the board member.

With respect to Claim 7, 9, 14 and 16, Villanueva et al. teaches a heat sink mounting apparatus or information handling system comprising: a board member (Fig. 2, #26); a processor socket (Fig. 2, #30) mounted on the board member and coupled to a mass storage device and a system memory (Para. 0004, line 5, stores); a processor (Fig. 2, #28) seated in the processor socket; a frame member (Fig. 2, #10) mounted on the board member; a plurality of connector members (Fig. 3, #16 and 18) on the frame member; a resilient load member (Fig. 2, #12) with a first end (Fig. 3, #16) connected to one of the connector members and a second end (Fig. 3, #18) connected to another one of the connector members, whereby the connection of the second end deforms (see Fig. 3) the load member into engagement with the processor and urges the processor into the processor socket; and a heat sink (Fig. 3, #34) mounted on the frame and adjacent to the load member. Villanueva et al. does not disclose a support member. Ma teaches a support member (Fig. 1, #72) mounted on an opposite side (see Fig. 1) of the board (Fig. 1, #50) from the frame member (Fig. 1, #36). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the heat sink mounting apparatus or information handling system of Villanueva et al. with that of Ma for the purpose of using the support member on apposite side of the board to fasten the frame member to the board member.

With respect to Claims 8 and 15, Villanueva et al. further teaches wherein the frame member surrounds (see Fig. 3) the processor socket.

With respect to Claims 10 and 17, Villanueva et al. further teaches wherein the first end of the resilient load member is pivotally (Fig. 2, #16) connected to one of the connector portions and the second end is latched (Fig. 3, #18) to another one of the connector portions.

With respect to Claims 11 and 18, Villanueva et al. further teaches wherein the processor includes a thermal connection surface (Para. 0022, line 18).

With respect to Claims 12, and 19, Villanueva et al. further teaches wherein the resilient load member includes an opening (Fig. 2, #20) whereby when the second end of the resilient load member is forcibly connected to its respective connector portion, the thermal connection surface is exposed in the opening.

With respect to Claims 13 and 20, Villanueva et al. further teaches wherein the heat sink engages (see Fig. 3) the thermal connection surface.

Regarding method claim 21, the method steps recited in the claim is inherently necessitated by the device structure as taught by Villanueva et al. (US 2005/0030718) in view of Ma (US 6,791,847).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Volz et al. (US 5,302,853) teaches the structure of claims 1-2 and 4-5.

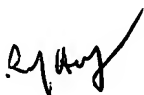
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Hoffberg whose telephone number is (571) 272-2761. The examiner can normally be reached on 8:30 AM - 4:30 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJH



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